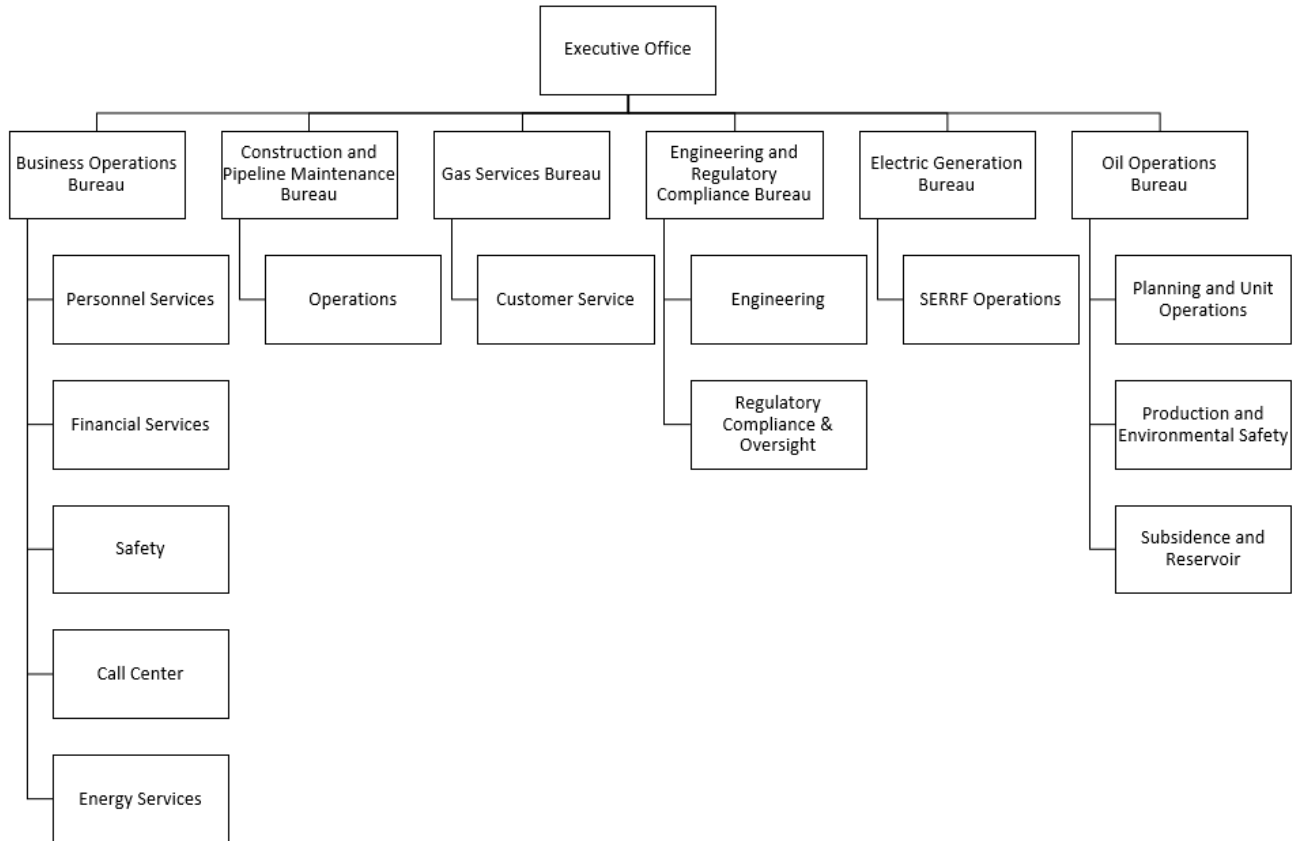


# Energy Resources



Robert Dowell - Director of Energy Resources

Tony Foster – Manager, Business Operations Bureau

Sean Crumby - Manager, Engineering and Regulatory Compliance Bureau

Charles R. Tripp - Manager, Electric Generation Bureau (SERRF)

Edward Farrell - Manager, Gas Services Bureau

Nathan Lynch – Manager, Construction & Pipeline Maintenance Bureau

Kevin Tougas - Manager, Oil Operations Bureau

# Department Overview

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## **Mission:**

To safely provide reliable price-competitive natural gas utility services to residents and businesses, to commercially accept regional refuse for conversion into electrical power for resale and to decrease dependency on local landfills, and to manage in an environmentally safe manner the City and State's onshore and offshore production of oil and natural gas to maximize production levels and revenues.

## **FY 20 Focus:**

The Energy Resources Department (ER) (formerly known as Long Beach Gas and Oil) consists of three significant enterprise operations: 1) a municipally-owned gas utility that, by customer count, is the seventh largest in the United States, supporting more than 154,000 customer accounts and maintaining 1,900 miles of main pipeline; 2) the Southeast Resource Recovery Facility (SERRF) creating electricity from refuse, processing about 375,000 tons of solid waste in Fiscal Year 2019; and, 3) a major oil field operation that produces about 10 million barrels annually with an exemplary environmental safety record.

**GAS** – Since 2012, the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA), has required all natural gas distribution pipeline operators to implement a Distribution Integrity Management Plan (DIMP). DIMP requires ER to periodically perform risk assessments on its pipelines by identifying, ranking and mitigating risks. Through the DIMP process, ER identified four significant risks to the City's gas distribution pipeline system: 1) excavation damage caused by third parties, 2) corrosion damage to older pipelines in the system, 3) past pipeline installation practices, and 4) susceptibility of major pipeline damage in the event of a localized earthquake. These risks are being mitigated through ER's ongoing pipeline replacement program.

In FY 20, ER will continue to focus on updating PHMSA required regulatory compliance documents that support overall distribution and operation activities. In FY 19, ER is implementing a new Operations and Maintenance policy and procedure manual and updated the Emergency Response Plan (ERP). In FY 20, ER will prepare the first Gas Master Plan. Whereas DIMP is focused on pipeline integrity, the Master Plan will include additional programs offered by the department in the delivery of natural gas service.

In FY 19, ER continued full operation of its Advanced Metering Infrastructure (AMI) system of approximately 154,000 gas meters. The AMI system enables the City's gas utility customers to utilize an array of interactive tools to monitor and optimize their gas consumption. This "smart meter" system greatly enhances privacy and security for utility customers as monthly visits from contract meter readers are no longer necessary. Through AMI, ER has reduced annual vehicle trips by 160,000 with a corresponding reduction in CO<sub>2</sub> emissions of 400,000 pounds every year.

ER continues to lead in the effort to lower greenhouse gas emissions by utilizing natural gas as an economically efficient alternative fuel source. In June 2017, ER began delivering Renewable Natural Gas (RNG or Biogas) to Long Beach Transit for their entire fleet of CNG-powered buses. In 2018, ER began delivering Biogas for the City's fleet of street sweepers and refuse trucks. Since Biogas is collected from decaying organic materials (landfills, livestock operations and waste water treatment) the combustion of Biogas is carbon neutral and does not add to greenhouse gas emissions. ER anticipates the rapid expansion of Biogas fuel to other CNG-powered vehicles throughout the City.

**OIL** - ER is the Unit Operator for the Wilmington Oil Field production activities and holds various interests in smaller oil fields throughout the City. These operations are significant, with over 2,000 active wells. While most net oil revenue goes to the State, Long Beach is anticipated to receive about \$12.6 million in the Tidelands Operating Fund and \$8.8 million in the Uplands Oil Fund in FY 20.

The fluctuating market price for a barrel of oil has a tremendous impact not only on revenue but also on operational decisions and investments in future exploration. For FY 20, ER has budgeted the realized price of oil at \$55 per barrel.

## Department Performance Measures

Key Measure	FY 18 Actual	FY 19 Target	FY 19 Estimate	FY 20 Projection
Number of feet of main pipeline replaced	50,382	10,000	27,000	10,000

Because of the federally required Distribution Integrity Management Plan (DIMP) review, the rate of targeted pipeline replacement is a critical measure to ensure the operational integrity and overall safety of the 1,900 miles of gas pipeline infrastructure. In FY 19, the pipeline replacement plan focused on large diameter, main pipe so as not to conflict with activity at service addresses. This work is primarily driven by corrosion damage to older pipelines in the system.

Key Measure	FY 18 Actual*	FY 19 Target*	FY 19 Estimate*	FY 20 Projection*
Number of barrels of oil produced (in millions)	10.5	10.5	10.2	9.5

The number of barrels of oil produced indicates the level of oil drilling activity for the year and the natural reservoir decline in oil production rate. \*Unit operator only.

Key Measure	FY 18 Actual	FY 19 Target	FY 19 Estimate	FY 20 Projection
Number of tons of waste processed at SERRF	360,000	409,000	375,000	410,000

The measure indicates the amount of waste that was kept out of local landfills. The fluctuations in tonnage listed are within the normal fluctuation of a 30-year-old facility of this type. It is expected to experience additional outages some years due to the age of equipment at the facility. Additionally, the lower production levels in FY 19 are due to unplanned outages and replacement of aging equipment.

Key Measure	FY 18 Actual	FY 19 Target	FY 19 Estimate	FY 20 Projection
Number of gas emergency service calls completed	5,640	5,500	6,106	6,000

Emergency service calls are received and dispatched by the Gas Services Bureau which operates a 24/7 emergency dispatch center. Reported leak calls are dispatched immediately for response and action.

## FY 19 Accomplishments

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- Replaced approximately 27,000 feet of main pipeline (the pipeline that runs under streets) Also, replaced 24,000 feet of service pipeline (pipeline that connects from the main pipeline to the customer's meter) in 2019.
- Installed new natural gas mains and services at development projects including Riverdale, Crescent Heights (Signal Hill) and Dorado.
- Implemented a new US Department of Transportation (DOT) rule requiring excess flow valves or curb valves be installed on each new or replaced service pipeline.
- Completed a thorough upgrade to the Operations and Maintenance policies and procedures manual.
- Completed update of Emergency Response Plan for the department.
- Responded to 14,000 requests for locating and marking underground gas pipeline facilities to minimize damage to gas pipelines associated with excavations.
- Conducted a survey for natural gas leaks on ER pipeline facilities representing about 30 percent of the City. Inspected every gas meter in the city.
- Repaired 150 leaks on gas main and service pipelines.
- As part of ER's DIMP, and ongoing commitment to reducing pipeline damage and to ensure the safety to residents, ER is continuing a multi-year sewer line inspection program to identify and repair any gas service pipelines that may encroach upon customer-owned sewer laterals. In 2019, approximately 1,000 sewer lines were inspected.
- A federally mandated safety audit will be held in July 2019 by the California Public Utilities Commission acting as agent for the Federal DOT.
- Work has been completed to refurbish the protective coatings and pipe hangers for 10 pipelines suspended beneath bridges.
- Manage the City and State's oil and natural gas operations consisting of over 2,000 active wells producing about 28,000 barrels of oil and nearly 11 million cubic feet of gas per day. The operations drilled approximately 16 wells and ensured adequate water injection into the subsurface to manage subsidence. The subsidence management program maintained stable elevations as verified by results obtained from approximately 540 elevation benchmarks throughout the oil field.
- SERRF processed its 14.3 millionth ton of refuse since opening in July 1988. That equals about 6.7 million megawatts of electricity produced. On average, SERRF provides 222,000 megawatts of energy each year, enough to support 31,000 households or 65,000 electric vehicles.
- Helped 5,800 low-income customers receive discounted utility bills.
- Handled more than 265,000 customer inquiries through the Utility Call Center with calls regarding gas, water, sewer and refuse services.
- Local supplies and favorable index pricing has allowed ER to maintain average residential gas bills that were similar to other Southern California gas utilities.
- Estimates safely completing 89,979 gas and water customer service orders and responding to 6,106 gas emergency calls during and after regular business hours.
- Estimates completing 1,385 meter installations and exchanges with full AMI deployment completed.
- Utility Services processed monthly utility bills for 165,000 customer accounts generating \$230 million in annual revenue.
- SERRF generated \$9 million in electricity sales.

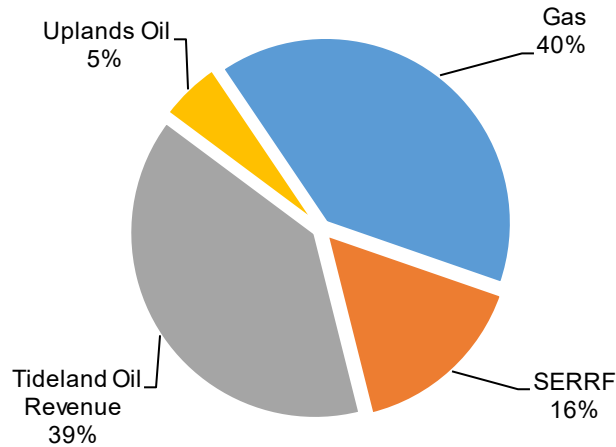
## **FY 19 Accomplishments**

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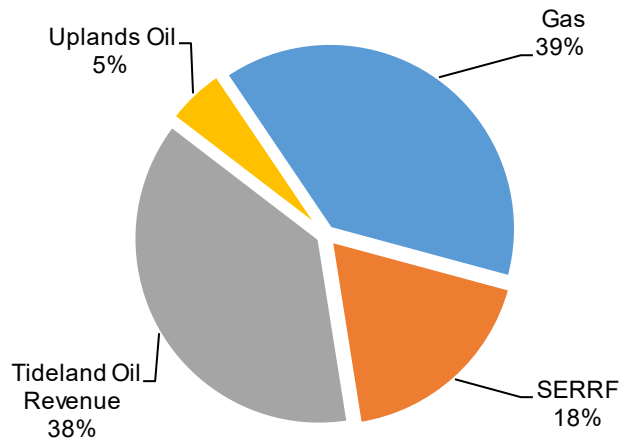
- Continues to engage in natural gas price-protection strategies to ensure customers are not unduly impacted by unforeseen seasonal natural gas price spikes.
- Fully complied with the requirements of the California Global Warming Solutions Act (AB32) by successfully meeting targeted reductions and carbon credit auction consignment obligations.

# FY 20 Budget

## FY 20 Revenues by Fund



## FY 20 Expenditures by Fund



## Fund Impact

Fund	Revenues	Expenditures*	Fund Impact
Gas	90,680,835	90,341,201	339,634
SERRF	35,950,000	42,765,903	(6,815,903)
Tideland Oil Revenue	89,209,421	88,631,829	577,592
Uplands Oil	12,239,561	12,046,161	193,401
<b>Total</b>	<b>228,079,817</b>	<b>233,785,093</b>	<b>(5,705,276)</b>

\*Includes Transfer to Other Funds of \$29,046,288

## Summary of Changes\*

<b>Gas Fund</b>	<b>Impact</b>	<b>Position</b>
Add a Chief Construction Inspector to oversee the inspection work unit.	157,098	1.00
Add three Gas Construction Worker II to provide assistance to the Department's Leak Survey, Corrosion, and Valves work group.	243,309	3.00
Establish a Construction and Pipeline Maintenance Bureau that will help strengthen oversight of pipeline maintenance and construction operations and ensure compliance with federal regulations.	-	-
Reduce budget for Letter of Credit and Fiscal Agent Fees, which is no longer needed.	(119,000)	-
Reduce the personnel budget to account for vacancies.	(95,947)	-
Update the salary resolution to increase the budgeted grades of Gas Maintenance Supervisor I and II classifications.	57,050	-
Upgrade a Gas Field Service Representative III to a Gas Distribution Supervisor I in the Gas Services Bureau to expedite the training process.	20,382	-
One-time enhancement of Cap and Trade funds to be transferred to Development Services, Public Works, and Fleet for projects reducing greenhouse gas emissions, offset by a combination of FY 20 project revenue and funds available.	1,050,932	-

<b>Tideland Oil Revenue Fund</b>	<b>Impact</b>	<b>Position</b>
Upgrade two Petroleum Operations Coordinator I positions to Petroleum Operations Coordinator II positions, offset by a reduction of a Geologist II.	(205,223)	(1.00)

<b>SERRF Fund</b>	<b>Impact</b>	<b>Position</b>
Increase budget to reflect projected costs for SERRF operations and maintenance.	2,174,000	-
Increase revenue to align budget with actual operational activity.	(518,600)	-
Reduce budgeted revenues to reflect changes in anticipated sources of revenue, including lower electricity sales due to a new purchase agreement, the end of litigation settlement payment between facility building Dravo Corp, and decreased private hauler revenue.	2,834,700	-

\* For ease of review, reallocations of resources within departments, offsets, adjustments, and minor changes have not been included. As figures reflect the net impact to a fund, an increase in expense is shown as a positive number (cost/hit to fund) and a decrease in expense is shown as a negative number (savings/benefit to fund). Accordingly, a decrease in revenue is shown as a positive number (cost/hit to fund), and an increase in revenue is shown as a negative number (savings/benefit to fund).

# Business Operations Bureau

## Key Services:

### 1. Personnel Management

- Payroll Processing, Auditing
- Employee Training and Development
- Coordination of Employee Benefits
- Recruitment, selection and onboarding
- Protected Leave Administration
- Workers Compensation/Return-to-work
- Administrative Investigations
- Performance Management

### 2. Occupational Safety Compliance

- Manage Cal-OSHA compliance for general industry activities
- Assess occupational safety training requirements and ensure compliance
- Evaluate incident trends and implement measures for mitigating loss
- Advise on corrective actions for identified or recognized hazards

### 3. Financial Oversight and Budget Management

- Forecasting Revenue/Expenditures
- Collect/Review/Coordinate Year-to-Year Budget Changes
- Estimates to Close Input
- Personnel Records/  
Org Year-to-Year Changes
- MOU Development/Review
- Accounting for all Funds (Gas, Gas Prepay, Uplands, SERRF, SERRF JPA, TORF)
- Payment Processing (Payables/Receivables)
- Article 9 Recalculation/ Redistribution
- Oil Revenue Distribution (State, City, Contractor, Working Interest Owners)
- Asset Capitalization

- Financial Statements and Management Reports

### 4. Natural Gas Supply Management

- Gas Demand/Supply Analysis
- Gas Procurement
- Large Customer Support
- Monthly Gas Rate Calculations and Fee Schedule
- Gas Nominations/Curtailment
- SoCal Gas Rate Case Monitoring
- Energy Rebate Program

### 5. ER Material & Supply Management

- Material/Supply Procurement
- Material/Supply Distribution
- Inventory Control

### 6. Government Affairs / Public Information / Regulatory Compliance

- Website Update/Support
- Public Records Act Request
- Information Update/Tracking
- AB32 Regulatory Compliance
- Customer Communication

### 7. Call Center Operations

- Receive/Respond to Customer Service Calls
- Develop Customer Service Orders
- Support Implementation of New CIS
- Setting up New Accounts
- Billing Quality Control and Meter Reading
- Closing Accounts/Final Billing

### 8. Executive Leadership / Strategic Projects

- Inter-departmental coordination
- New initiatives Oversight
- Policy Development
- Operational Coordination

**FY 20 Funding Sources:** Gas Fund 97%, Tideland Oil Revenue Fund 3%

Business Operations	Actuals FY 18	Adjusted* FY 19	Proposed* FY 20
Revenues	96,190,180	82,908,779	84,242,218
Expenditures	71,785,985	62,159,514	61,829,050
FTEs	60.67	64.67	64.67

\*Amounts exclude all-years carryover.



## Business Operations Bureau

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### **Narrative:**

The implementation of the California Global Warming Solutions Act of 2006 (AB 32) was extended in 2015 to include the natural gas industry (including distributors such as ER). By regulation, ER is required to complete annual Green House Gas (GHG) emission reports. These reports are verified by a third party and are in accordance with AB 32's "Cap and Trade" provisions. The final program rules for natural gas distributors under the "Cap and Trade" provisions, which were adopted by the California Air Resources Board and require ER to engage in purchasing carbon credits.

The Cap-and-Trade regulation further places limits on the use of allowances that the California Air Resources Board (CARB) allocates natural gas suppliers. These requirements, which are in section 95893 of the regulation, mandate that each natural gas supplier annually report to CARB on how its uses of allocated allowances met these requirements. ER continues to work diligently by participating in the allowance auctions and reporting auction proceeds in compliance with the regulations.

ER continues to contract with producers of renewable biogas for use in Long Beach Transit busses and city fleet services, such as refuse haulers and street sweepers. By using this renewable gas in its bussing and fleet operations, the City qualifies for renewable energy credits that cover roughly 80 percent of the cost of the fuel itself. This provides a much-reduced fuel cost that is also a net-zero carbon impact on the environment.

ER's Advanced Metering Infrastructure (AMI) program is the industry's best practice for all major gas and electric utilities statewide including Southern California Edison, Southern California Gas Company, San Diego Gas and Electric, Pacific Gas and Electric. Numerous municipal utilities, such as the Los Angeles Department of Water and Power, have replaced, or are in the process of replacing their manually read meters with Smart Meter systems. The benefits of the AMI system include improved metering efficiency, enhanced customer information, reduced operational costs, and reduced carbon emissions. ER is currently assisting the Long Beach Water Department in implementing AMI and integrating into the City's utility billing system.

In November 2018, pursuant to AB 797, ER received City Council approval to implement a Solar Thermal System Incentive Program (Program) for residential and commercial solar water heating systems. Implementation of the Program supports statewide greenhouse gas reduction goals identified in AB 32. A solar water heating system is a solar energy device with the primary purpose of reducing demand for natural gas through water heating, space heating, or other methods of capturing energy from the sun to reduce natural gas consumption in a home, business, or any building receiving natural gas that is a utility retail customer that meets or exceeds certain eligibility criteria. The Program further requires reserving 50 percent of the total incentive revenue collected until 2020 for installation of solar water heating systems in low-income residential housing or in buildings in disadvantaged communities.

ER will continue to seek opportunities for promoting natural gas as a clean energy alternative. New projects include gas-fired fuel cell technology for the Aquarium of the Pacific and several multifamily housing developments; construction of a compressed natural gas (CNG) fueling station in the harbor to support a clean-fuel alternative for transportation of goods in and out of the Ports of Long Beach and Los Angeles; and, expanded implementation of biogas purchases and distribution supporting clean-fuel credits for transportation customers.

# Construction & Pipeline Maintenance Bureau

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## Key Services:

### 1. Gas Emergency Response (Pipeline)

- Emergency Response to leak calls from public
- Leak Investigations and repairs
- Maintain Emergency Valves as required by PHMSA

### 2. Gas Pipeline Repair & Installation

- Alter gas pipelines in response to requests by customers
- Replace sections of gas pipelines
- Disconnect pipelines for building demolition
- Maintain and repair gas pipelines
- Install gas pipelines in response to customer requests
- Bridge Patrol and repairs
- Survey the gas system for leaks

### 3. Cathodic Protection and Corrosion Control

- Survey cathodic protections systems as required by PHMSA
- Maintain cathodic protection system facilities
- Construction cathodic protection systems
- Pipeline casing inspection
- Monitor pipeline for internal corrosion

**FY 20 Funding Source:** Gas Fund 100%

<b>Construction and Pipeline Maintenance</b>	<b>Actuals FY 18</b>	<b>Adjusted* FY 19</b>	<b>Proposed* FY 20</b>
Revenues	-	-	6,000,897
Expenditures	-	-	16,829,061
FTEs	0.00	0.00	59.00

\*Amounts exclude all-years carryover.

## Narrative:

The U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) requires that certain inspections and surveys be performed on all natural gas distribution systems. Surveys for gas pipeline leaks include business districts, hospitals, schools and churches, which must be checked annually and residential areas, of which 20 percent must be checked annually. In addition, inspections are required on all valves necessary for emergency operation, all corrosion control areas and all district regulator stations. ER accomplished all required surveys and inspections in FY 19.

# Engineering Bureau

## Key Services:

### 1. Gas Pipeline Systems Regulatory Compliance and Safety Training

- Maintain Emergency Valves as required by PHMSA
- Maintain district regulator stations as required by PHMSA
- Review/upgrade/maintain PHMSA required plans
- Train and test employees and contractors to PHMSA requirements

### 2. Underground Service Alert Response

- Locate and mark underground gas pipelines prior to excavation by third parties

### 3. Gas Construction Inspection and Project Management

- Inspect and coordinate ER and developer/contractor pipeline projects for compliance with standards

- Investigate requests by customers for new or changed gas service and meter requirements

- Manage pipeline construction projects

### 4. Gas System Engineering, Design & Records Maintenance

- Engineer and design gas pipelines on capital projects
- Produce specifications, plans and cost estimates for capital pipeline construction projects
- Produce drawings and acquire permits
- Produce reports for PHMSA audit inspections
- Maintaining and updating project work orders
- Maintaining and updating GIS

**FY 20 Funding Source:** Gas Fund 100%

Engineering	Actuals FY 18	Adjusted* FY 19	Proposed* FY 20
Revenues	6,878,942	8,334,341	2,333,444
Expenditures	23,759,496	22,926,214	6,103,410
FTEs	88.34	85.00	28.00

\*Amounts exclude all-years carryover.

## Narrative:

The Engineering Bureau helps design, maintain, and inspect the underground pipeline system that delivers natural gas supplies to Long Beach and Signal Hill residents and businesses by working with developers, contractors, and homeowners to assist in the process of installing quality gas systems.

In FY 20, the bureau is requesting to add a Chief Construction Inspector to manage the Construction Inspection and Underground Service Alert functions of the department.

# Electric Generation Bureau

## Key Services:

### 1. Waste-to-Energy Operations

- Facility Operations
- Site inspection, daily contractor oversight
- Permit and other regulatory expenses
- Insurance
- Facility bond repayment

### 2. Narcotics Destruction

- Provide safe access to SERRF combustors
- Scheduling

### 3. SERRF Administration

- Regulatory Compliance management
- Contract management
- Budget preparation, tracking and forecasting
- Public policy analysis
- Refuse Marketing (ensuring sufficient refuse quantities)
- Accounts Payable
- Public outreach, Industry leadership

**FY 20 Funding Source:** SERRF Fund Group 100%

<b>Electric Generation</b>	<b>Actuals FY 18</b>	<b>Adjusted* FY 19</b>	<b>Proposed* FY 20</b>
Revenues	41,660,366	50,166,100	35,950,000
Expenditures	46,141,698	51,536,178	42,765,903
FTEs	3.50	3.50	3.50

\*Amounts exclude all-years carryover.

## Narrative:

The Waste-to-Energy Program includes the operation of the Southeast Resource Recovery Facility (SERRF), which is a mass-burn waste-to-energy facility that incinerates residential and commercial refuse. A portion of the electricity generated is used to power SERRF (15 percent), while the remainder is sold to the CAISO Day Ahead Exchange. The facility helps keep Long Beach refuse rates competitive in the market and provides a positive alternative to the environmental impacts of sending waste to a landfill. As a public service, SERRF also works with federal, state, and local law enforcement agencies to destroy narcotics and drug-related paraphernalia. In FY 19, over 530,000 pounds of confiscated material were destroyed.

With the closure of the Puente Hills Landfill in November 2013, SERRF continues to experience a significant increase in operational costs. The waste ash generated by SERRF was previously used at the Puente Hills Landfill, with no disposal fee charged to SERRF. Now it is necessary to haul waste ash to the El Sobrante Landfill and pay a disposal charge. This has resulted in an increase of approximately \$5.3 million in operational expenses annually.

SERRF reached its 30<sup>th</sup> year of operations in FY19. As the facility is aging, staff is working to address a number of age related issues. The City and facility operator (Covanta) have committed a total of \$13.72 million into replacing old and failing equipment. The remedial work began in FY 18 and should be complete in FY 21. Also in FY 19, facilities bonds were fully paid reducing operational costs, the electrical generation contract between the City of Long Beach and Southern California Edison ended, and new agreements with CAISO and Southern California Edison were finalized in order to continue selling electricity produced at SERRF. Staff is continuing to pursue an aggressive policy to increase its private hauler refuse disposal fees to offset higher operational costs. Staff is also identifying operational agreements that take advantage of some newer green technologies in addressing the City's waste disposal needs. SERRF is a proven asset at providing environmentally sound solutions to the City's waste disposal, and with new solutions, it can continue well into the future.

# Gas Services Bureau

## Key Services:

### 1. Customer Service

- Emergency Response
- Meter Turn-On and Turn-Off Orders
- Pilot Lighting
- Gas Appliance Service/Safety Inspection
- Billing Related Service Orders

### 2. Gas Metering and Regulation (and related activities)

- New Meter Installation
- Meter Proving
- Meter Maintenance and Painting
- AMI Data Management and Reporting
- AMI Meter Management and Installation

### 3. Service Order Dispatching and System Control

- Prepare and Route Daily Work orders
- Receive and Dispatch After Hours Emergency and Priority Service Calls
- Pressure Monitoring and Gate Station Control
- Monitor Gas Quality
- Instrument Calibrations

### 4. Gas Telemetry & Calibrations

- District Regulation
- Maintain City Gate and Local Producer Sites
- Measurement Reporting
- Instrument Calibrations
- SCADA network maintenance

## FY 20 Funding Source: Gas Fund Group 100%

Gas Services	Actuals FY 18	Adjusted* FY 19	Proposed* FY 20
Revenues	2,730,813	2,388,727	2,388,727
Expenditures	7,588,719	7,894,258	7,206,715
FTEs	61.88	62.22	64.22

\*Amounts exclude all-years carryover.

## Narrative:

The Gas Services Bureau (GSB) continues to provide outstanding service to the residents of Long Beach and Signal Hill. Field Service Representatives safely completed more than 89,000 service orders. GSB continues to keep service order schedules within a three-business day window. Residents are regularly able to schedule next-day service orders throughout the year. GSB operates a 24/7 dispatch and emergency phone line and dispatched and resolved 6,106 emergency orders in FY 19.

Implementation of a soft-close procedure which prevents interruption of gas services in the interim between active accounts has produced a number of positive outcomes. For FY 19, and as a result of the soft-close procedure, the GSB is estimating the completion of approximately 5,600 fewer turn-off orders. This in turn reduces the number of corresponding gas turn-on orders. The reduction of these field activities has significantly reduced the number of vehicle trips associated with each turn-off and turn-on activity. Reducing the number of associated turn-on orders has reduced service order scheduling pressure and allowed for shorter wait times much of the year. Finally, in an ever-increasing regulatory environment, the GSB is better able to allocate resources to complete mandated preventative maintenance and compliance related activities.

# Oil Operations Bureau

## Key Services:

### 1. Subsidence Mitigation

- Conduct field wide elevation surveys at least twice a year
- Prepare elevation maps and annual elevation report to City Council
- Prepare annual budget for State Land Commission approval
- Continuous elevation monitoring via GPS system
- Set voidage balancing guidelines and continuously monitor for compliance
- Meetings with field contractor

### 2. Oil Spill Prevention and Response

- Ensure oil field environmental regulatory compliance
- Oil field inspections
- Participate in audits
- Facility project approval
- Review maintenance programs and capital investments
- Oil well and pipeline abandonment

### 3. Oil Field Planning and Contract Management

- Calculate abandonment liability
- Coordinate with POLB on port development impacts to oil operations
- Oil sale measurement and quality verification
- Oil field procurement approval
- Working interest owner support
- Long Beach Unit annual plan and program plan
- Estimate of oil operations and City budget

### 4. Optimization of Oil and Gas Production

- Reservoir management
- Oil field life planning
- Conduct engineering reviews of proposed drilling and investment well work
- Economic investment justification approval

**FY 20 Funding Sources:** Tidelands Oil Revenue Fund Group 88%, Uplands Oil Fund Group 12%

Oil Operations	Actuals FY 18	Adjusted* FY 19	Proposed* FY 20
Revenues	136,213,906	97,164,531	97,164,531
Expenditures	128,598,577	98,283,207	99,050,954
FTEs	18.00	18.00	17.00

\*Amounts exclude all-years carryover.

## Narrative:

The oil assets managed by ER continue to provide for a viable transfer of revenue to the Tidelands Operating Fund and the Uplands Oil Fund. The FY 20 Budget is based on the realized price of oil at \$55 per barrel.

The FY 20 Budget supports a transfer of \$12.6 million to the City's Tidelands Operating Fund as its proportionate share in the profits from the Wilmington Oil Field operations; and, an anticipated transfer of \$8.8 million from the Uplands Oil Fund to the General Fund from the City's oil interests' profits as well as the administrative fee earned as Unit Operator.

The FY 20 Budget will continue to allow ER to manage the performance of the City and State's onshore and offshore oil and natural gas operations in a manner to protect the environment and avoid subsidence, while strengthening the oil fields fiscal sustainability. These total resources will allow the operation to manage over 2,000 wells in the Wilmington field, direct the drilling of approximately 16 new wells, survey 540 benchmarks, ensure the injection of more water into the reservoir than the total fluids produced, and produce approximately 9.5 million barrels of oil.

## Financial Summary by Category

	Actual FY 18	Adopted* FY 19	Adjusted* FY 19	Proposed* FY 20
<b>Revenues:</b>				
Property Taxes	-	-	-	-
Other Taxes	-	-	-	-
Franchise Fees	-	-	-	-
Licenses and Permits	-	-	-	-
Fines and Forfeitures	-	-	-	-
Use of Money & Property	141,191,311	101,938,132	101,938,132	102,088,132
Revenue from Other Agencies	-	-	-	-
Charges for Services	127,997,587	110,850,434	111,916,995	110,542,734
Other Revenues	1,338,771	12,765,788	12,765,788	738,788
Interfund Services - Charges	12,771,003	14,341,563	14,341,563	14,710,163
Intrafund Services - General Fund Charges	375,535	-	-	-
Harbor & Water P/R Rev Trsfs	-	-	-	-
Other Financing Sources	-	-	-	-
Operating Transfers	-	-	-	-
Total Revenues	283,674,207	239,895,917	240,962,478	228,079,817
<b>Expenditures:</b>				
Salaries, Wages and Benefits	24,547,006	26,878,848	26,747,355	27,439,874
Overtime	655,160	360,884	435,190	360,884
Materials, Supplies and Services	193,130,219	166,853,895	167,083,836	158,124,249
Internal Support	8,754,526	9,692,997	9,692,997	10,761,018
Capital Purchases	338,511	1,488,455	1,497,793	1,488,455
Debt Service	1,884,006	1,544,810	1,544,810	1,425,810
Transfers to Other Funds	48,565,047	29,046,288	35,797,391	34,184,804
Total Expenditures	277,874,475	235,866,177	242,799,372	233,785,093
<b>Personnel (Full-time Equivalents)</b>	232.39	233.39	233.39	236.39

\* Amounts exclude all-years carryover.

## Personnel Summary

Classification	FY 18 Adopt FTE	FY 19 Adopt FTE	FY 20 Prop FTE	FY 19 Adopted Budget	FY 20 Proposed Budget
Director of Energy Resources	1.00	1.00	1.00	217,636	217,636
Accountant III	2.00	2.00	2.00	174,171	157,938
Accounting Clerk III	2.00	2.00	2.00	101,874	104,488
Accounting Technician	0.50	0.50	0.50	24,496	24,496
Administrative Analyst II	2.00	-	-	-	-
Administrative Analyst III	1.00	3.00	3.00	278,141	275,861
Administrative Officer	1.00	1.00	1.00	114,658	114,658
Assistant Administrative Analyst II	2.00	2.00	2.00	128,317	125,334
Chief Construction Inspector	-	-	1.00	-	102,348
Clerk Typist III	3.00	3.00	2.00	140,972	94,217
Construction Inspector I	2.00	2.00	2.00	178,540	178,540
Construction Inspector II	6.00	7.00	7.00	651,114	651,745
Customer Service Representative III	25.00	25.00	25.00	1,269,796	1,301,857
Customer Service Representative II-NC	3.67	3.67	3.67	153,171	153,163
Customer Services Officer	1.00	1.00	1.00	90,883	90,882
Customer Services Supervisor II	4.00	4.00	4.00	270,334	277,643
Customer Services Supervisor III	1.00	1.00	1.00	64,307	78,241
Department Safety Officer	1.00	1.00	1.00	97,381	97,380
Division Engineer-Oil Properties	3.00	3.00	3.00	496,683	496,685
Electrician	1.00	1.00	1.00	68,140	68,140
Energy Services Officer	1.00	1.00	1.00	119,435	119,436
Engineering Technician I	2.00	2.00	2.00	116,739	118,961
Engineering Technician II	4.00	4.00	4.00	280,935	274,176
Executive Assistant	1.00	1.00	1.00	71,040	67,087
Financial Services Officer	1.00	1.00	1.00	113,723	113,723
Gas Construction Worker II	22.00	22.00	25.00	1,296,816	1,396,818
Gas Construction Worker III	3.00	3.00	3.00	195,870	200,329
Gas Distribution Supervisor I	6.00	6.00	7.00	495,857	586,122
Gas Distribution Supervisor II	2.00	2.00	2.00	188,917	188,917
Gas Field Service Representative I - NC	3.22	3.22	3.22	131,780	131,773
Gas Field Service Representative II	35.00	35.00	35.00	2,041,765	2,034,582
Gas Field Service Representative III	13.00	13.00	12.00	900,208	785,882



## Personnel Summary

Classification	FY 18 Adopt FTE	FY 19 Adopt FTE	FY 20 Prop FTE	FY 19 Adopted Budget	FY 20 Proposed Budget
Gas Field Technician I	3.00	3.00	3.00	182,789	222,058
Gas Field Technician II	4.00	4.00	4.00	269,720	302,178
Gas Field Technician III	3.00	3.00	3.00	197,999	232,477
Gas Maintenance Supervisor I	8.00	8.00	8.00	674,256	696,618
Gas Maintenance Supervisor II	3.00	3.00	2.00	283,375	175,754
Gas Pipeline Compliance Officer	1.00	1.00	1.00	119,965	111,774
Gas Pipeline Welder/Layout Fitter	5.00	5.00	5.00	383,120	397,167
General Maintenance Supervisor II	1.00	1.00	1.00	71,271	71,271
Geologist II	2.00	2.00	1.00	305,799	157,146
Maintenance Assistant I	1.00	1.00	1.00	40,084	40,084
Maintenance Assistant II	1.00	1.00	1.00	36,316	44,199
Manager-Business Operations	1.00	1.00	1.00	138,015	138,015
Manager-Electric Generation	1.00	1.00	1.00	165,105	165,104
Manager-Engineering and Construction	1.00	1.00	1.00	153,194	153,194
Manager-Gas Services	1.00	1.00	1.00	130,505	130,506
Manager-Oil Operations	1.00	1.00	1.00	183,611	183,610
Manager-Pipeline Construction	-	-	1.00	-	130,000
Mechanical Engineer	2.00	2.00	1.00	224,928	103,993
Mechanical Engineering Associate	2.00	2.00	2.00	179,821	186,696
Payroll/Personnel Assistant II	1.00	1.00	1.00	51,546	51,546
Payroll/Personnel Assistant III	1.00	1.00	1.00	56,800	56,800
Petroleum Engineer I	-	1.00	1.00	115,920	129,435
Petroleum Engineer II	3.00	3.00	3.00	471,437	442,516
Petroleum Engineering Associate II	1.00	1.00	1.00	104,391	107,139
Petroleum Operations Coordinator I	6.00	5.00	3.00	597,098	340,462
Petroleum Operations Coordinator II	-	-	2.00	-	269,754
Principal Construction Inspector	1.00	1.00	1.00	110,309	110,831
Secretary	5.00	5.00	6.00	266,425	327,108
Senior Accountant	2.00	2.00	2.00	185,283	189,958
Senior Engineering Technician I	1.00	1.00	1.00	86,303	90,668
Senior Equipment Operator	5.00	5.00	5.00	358,010	341,652
Senior Mechanical Engineer	1.00	1.00	2.00	114,237	254,914
Senior Surveyor	1.00	1.00	1.00	102,735	87,645

## Personnel Summary

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